1. Filter Paper

1.1 Qualitative Filter Paper

1.1.1 Standard Grades

Hawach Scientific Qualitative filter papers are manufactured from high-quality cotton linters, ensuring quality, re-producibility and uniformity. With average 0.1% ash content. Qualitative filter papers are used for analytical and routine analyses, when no gravimetric analyses are required. A wide range of retention/flow rate combinations matches numerous laboratory applications.The filter paper approved by certificate of CE.

Features

* Supply in Slow, Medium and Fast flow rate
* 55, 70, 90, 110, 125, 150, 180, 185, 240, 320,400mm diameter or OEM size in available
* Ideal for analytical and routine analyses

Grade Comparison

Hawach	BIO-1	BIO-2	BIO-4	BIO-5	BIO-6
Whatman	Grade 1	Grade 2	Grade 4	Grade 5	Grade 6
Advantec	2	232	1	235	131
Munktell	No.1/1F	No.2/150	1288/3	293/120H	1290/1001
Ahlstrom	601	642	631	610	950
Macherey Nagel	616	616md	1670	619eh	619eh

Hawach Scientific

Applications

Qualitative filter paper covers a wide range of laboratory applications and frequently used for clarifying liquids.

- Soil analysis and seed testing procedures in agriculture
- Separate solid foodstuffs from associated liquid or extracting liquid in food industry
- Widely used in education for teaching simple qualitative analytical separations
- Use circles collect atmospheric dust from air flow in air pollution monitoring

Food Industry

- Wine
- Beer
- Juices
- Chocolate
- Milk
- Sugar
- Oil

Enviromental Analysis

- Air Polution
- Waste
- Water

Angricultural Analysis

- Fertilizers
- Fodders
- Seeds
- Soils

Technical Data

Grade	Particle Retention	Product Appearance	Filtration Speed	Ash Content (%)	Basis Weight (g/m^2)	Wet Burst (mm H_2O)
BIO-1	11μm	Smooth	Medium	<0.1	84	>140
BIO-2	8μm	Smooth	Medium	<0.1	84	>140
BIO-4	20μm	Smooth	Fast	<0.1	84	>120
BIO-5	2.5μm	Smooth	Slow	<0.1	84	>180
BIO-6	3.0μm	Smooth	Slow	<0.1	84	>180

Order Information (Customized size available)

Qualitative Filter Papers - Standard Grades		
Grade 1		
Cat#	**Description**	**Equivalent to Whatman**
22012002	Qualitative Filter Papers, Grade 1, Medium, 11um, 45mm, 100pcs/pk	-
22012003	Qualitative Filter Papers, Grade 1, Medium, 11um, 47mm, 100pcs/pk	-
22012004	Qualitative Filter Papers, Grade 1, Medium, 11um, 50mm, 100pcs/pk	1001-050
22012005	Qualitative Filter Papers, Grade 1, Medium, 11um, 55mm, 100pcs/pk	1001-055

22011101	Qualitative Filter Papers, Grade 1, Medium, 11um, 70mm, 100pcs/pk	1001-070
22011102	Qualitative Filter Papers, Grade 1, Medium, 11um, 90mm, 100pcs/pk	1001-090
22011103	Qualitative Filter Papers, Grade 1, Medium, 11um, 110mm, 100pcs/pk	1001-110
22011104	Qualitative Filter Papers, Grade 1, Medium , 11um, 125mm, 100pcs/pk	1001-125
22011105	Qualitative Filter Papers, Grade 1, Medium, 11um, 150mm, 100pcs/pk	1001-150
22011106	Qualitative Filter Papers, Grade 1, Medium, 11um, 180mm, 100pcs/pk	-
22012007	Qualitative Filter Papers, Grade 1, Medium, 11um, 185mm, 100pcs/pk	1001-185
22012008	Qualitative Filter Papers, Grade 1, Medium, 11um, 200mm, 100pcs/pk	1001-200
22012009	Qualitative Filter Papers, Grade 1, Medium, 11um, 220mm, 100pcs/pk	1001-220
22012010	Qualitative Filter Papers, Grade 1, Medium, 11um, 240mm, 100pcs/pk	1001-240
22012011	Qualitative Filter Papers, Grade 1, Medium, 11um, 250mm, 100pcs/pk	1001-250
22012012	Qualitative Filter Papers, Grade 1, Medium, 11um, 270mm, 100pcs/pk	1001-270
22012014	Qualitative Filter Papers, Grade 1, Medium, 11um, 300mm, 100pcs/pk	1001-300
22012015	Qualitative Filter Papers, Grade 1, Medium, 11um, 320mm, 100pcs/pk	1001-320
22012016	Qualitative Filter Papers, Grade 1, Medium, 11um, 350mm, 100pcs/pk	1001-350
22012017	Qualitative Filter Papers, Grade 1, Medium, 11um, 380mm, 100pcs/pk	-
22012018	Qualitative Filter Papers, Grade 1, Medium, 11um, 400mm, 100pcs/pk	1001-400
22012019	Qualitative Filter Papers, Grade 1, Medium, 11um, 450mm, 100pcs/pk	1001-450
22012020	Qualitative Filter Papers, Grade 1, Medium, 11um, 600mm, 100pcs/pk	1001-600
22012091	Qualitative Filter Papers, Grade 1, Medium, 11um, 610mm, 100pcs/pk	-

Grade 2

Cat#	Description	Equivalent to Whatman
22012021	Qualitative Filter Papers, Grade 2, Medium, 8um, 55mm, 100pcs/pk	-
22011107	Qualitative Filter Papers, Grade 2, Medium, 8um, 70mm, 100pcs/pk	1002-070
22011108	Qualitative Filter Papers, Grade 2, Medium, 8um, 90mm, 100pcs/pk	1002-090
22011109	Qualitative Filter Papers, Grade 2, Medium, 8um, 110mm, 100pcs/pk	1002-110
22011110	Qualitative Filter Papers, Grade 2, Medium, 8um, 125mm, 100pcs/pk	1002-125
22012022	Qualitative Filter Papers, Grade 2, Medium, 8um, 146mm, 100pcs/pk	-
22011111	Qualitative Filter Papers, Grade 2, Medium, 8um, 150mm, 100pcs/pk	1002-150
22011112	Qualitative Filter Papers, Grade 2, Medium, 8um, 180mm, 100pcs/pk	-
22012023	Qualitative Filter Papers, Grade 2, Medium, 8um, 200mm, 100pcs/pk	1002-200
22012024	Qualitative Filter Papers, Grade 2, Medium, 8um, 220mm, 100pcs/pk	1002-220
22012070	Qualitative Filter Papers, Grade 2, Medium, 8um, 240mm, 100pcs/pk	1002-240
22012025	Qualitative Filter Papers, Grade 2, Medium, 8um, 250mm, 100pcs/pk	1002-250
22012071	Qualitative Filter Papers, Grade 2, Medium, 8um, 270mm, 100pcs/pk	1002-270
22012026	Qualitative Filter Papers, Grade 2, Medium, 8um, 300mm, 100pcs/pk	1002-300
22012027	Qualitative Filter Papers, Grade 2, Medium, 8um, 320mm, 100pcs/pk	1002-320
22012028	Qualitative Filter Papers, Grade 2, Medium, 8um, 350mm, 100pcs/pk	1002-350
22012030	Qualitative Filter Papers, Grade 2, Medium, 8um, 400mm, 100pcs/pk	1002-400

22012029	Qualitative Filter Papers, Grade 2, Medium, 8um, 450mm, 100pcs/pk	1002-450
22012031	Qualitative Filter Papers, Grade 2, Medium, 8um, 600mm, 100pcs/pk	1002-600
22012186	Qualitative Filter Papers, Grade 2, Medium, 8um, 610mm, 100pcs/pk	

Grade 4

Cat#	Description	Equivalent to Whatman
22012072	Qualitative Filter Papers, Grade 4, Fast, 20-25um, 50mm, 100pcs/pk	1004-050
22012073	Qualitative Filter Papers, Grade 4, Fast, 20-25um, 55mm, 100pcs/pk	1004-055
22011113	Qualitative Filter Papers, Grade 4, Fast, 20-25um, 70mm, 100pcs/pk	1004-070
22011114	Qualitative Filter Papers, Grade 4, Fast, 20-25um, 90mm, 100pcs/pk	1004-090
22011115	Qualitative Filter Papers, Grade 4, Fast, 20-25um, 110mm, 100pcs/pk	1004-110
22011116	Qualitative Filter Papers, Grade 4, Fast, 20-25um, 125mm, 100pcs/pk	1004-125
22011117	Qualitative Filter Papers, Grade 4, Fast, 20-25um, 150mm, 100pcs/pk	1004-150
22011118	Qualitative Filter Papers, Grade 4, Fast, 20-25um, 180mm, 100pcs/pk	-
22012074	Qualitative Filter Papers, Grade 4, Fast, 20-25um, 185mm, 100pcs/pk	1004-185
22012036	Qualitative Filter Papers, Grade 4, Fast, 20-25um, 200mm, 100pcs/pk	1004-200
22012037	Qualitative Filter Papers, Grade 4, Fast, 20-25um, 220mm, 100pcs/pk	1004-220
22012038	Qualitative Filter Papers, Grade 4, Fast, 20-25um, 240mm, 100pcs/pk	1004-240
22012039	Qualitative Filter Papers, Grade 4, Fast, 20-25um, 250mm, 100pcs/pk	1004-250
22012075	Qualitative Filter Papers, Grade 4, Fast, 20-25um, 270mm, 100pcs/pk	1004-270
22012040	Qualitative Filter Papers, Grade 4, Fast, 20-25um, 293mm,100pcs/pk	-
22012041	Qualitative Filter Papers, Grade 4, Fast, 20-25um, 300mm, 100pcs/pk	1004-300
22012042	Qualitative Filter Papers, Grade 4, Fast, 20-25um, 320mm, 100pcs/pk	1004-320
22012043	Qualitative Filter Papers, Grade 4, Fast, 20-25um, 350mm, 100pcs/pk	1004-350
22012076	Qualitative Filter Papers, Grade 4, Fast, 20-25um, 400mm, 100pcs/pk	1004-400
22012044	Qualitative Filter Papers, Grade 4, Fast, 20-25um, 450mm, 100pcs/pk	1004-450
22012045	Qualitative Filter Papers, Grade 4, Fast, 20-25um, 600mm, 100pcs/pk	1004-600
22012089	Qualitative Filter Papers, Grade 4, Fast, 20-25um, 610mm, 100pcs/pk	-

Grade 5

Cat#	Description	Equivalent to Whatman
22012077	Qualitative Filter Papers, Grade 5, Slow, 2.5um, 50mm, 100pcs/pk	1005-050
22011119	Qualitative Filter Papers, Grade 5, Slow, 2.5um, 70mm, 100pcs/pk	1005-070
22011120	Qualitative Filter Papers, Grade 5, Slow, 2.5um, 90mm, 100pcs/pk	1005-090
22011121	Qualitative Filter Papers, Grade 5, Slow, 2.5um, 110mm, 100pcs/pk	1005-110
22011122	Qualitative Filter Papers, Grade 5, Slow, 2.5um, 125mm, 100pcs/pk	1005-125
22011123	Qualitative Filter Papers, Grade 5, Slow, 2.5um, 150mm, 100pcs/pk	1005-150
22011124	Qualitative Filter Papers, Grade 5, Slow, 2.5um, 180mm, 100pcs/pk	-
22012047	Qualitative Filter Papers, Grade 5, Slow, 2.5um, 200mm, 100pcs/pk	1005-200
22012048	Qualitative Filter Papers, Grade 5, Slow, 2.5um, 220mm, 100pcs/pk	1005-220

22012078	Qualitative Filter Papers, Grade 5, Slow, 2.5um, 240mm, 100pcs/pk	1005-240
22012049	Qualitative Filter Papers, Grade 5, Slow, 2.5um, 250mm, 100pcs/pk	1005-250
22012079	Qualitative Filter Papers, Grade 5, Slow, 2.5um, 270mm, 100pcs/pk	1005-270
22012051	Qualitative Filter Papers, Grade 5, Slow, 2.5um, 300mm, 100pcs/pk	1005-300
22012052	Qualitative Filter Papers, Grade 5, Slow, 2.5um, 320mm, 100pcs/pk	1005-320
22012053	Qualitative Filter Papers, Grade 5, Slow, 2.5um, 350mm, 100pcs/pk	1005-350
22012054	Qualitative Filter Papers, Grade 5, Slow, 2.5um, 380mm, 100pcs/pk	-
22012055	Qualitative Filter Papers, Grade 5, Slow, 2.5um, 400mm, 100pcs/pk	1005-400
22012056	Qualitative Filter Papers, Grade 5, Slow, 2.5um,450mm, 100pcs/pk	1005-450
22012057	Qualitative Filter Papers, Grade 5, Slow, 2.5um, 600mm, 100pcs/pk	1005-600
22012183	Qualitative Filter Papers, Grade 5, Slow, 2.5um, 610mm, 100pcs/pk	-
Grade 6		
Cat#	**Description**	**Equivalent to Whatman**
22012080	Qualitative Filter Papers, Grade 6, Slow, 3um, 50mm, 100pcs/pk	1006-050
22011125	Qualitative Filter Papers, Grade 6, Slow, 3um, 70mm, 100pcs/pk	1006-070
22011126	Qualitative Filter Papers, Grade 6, Slow, 3um, 90mm, 100pcs/pk	1006-090
22011127	Qualitative Filter Papers, Grade 6, Slow, 3um, 110mm, 100pcs/pk	1006-110
22011128	Qualitative Filter Papers, Grade 6, Slow, 3um, 125mm, 100pcs/pk	1006-125
22011129	Qualitative Filter Papers, Grade 6, Slow, 3um, 150mm, 100pcs/pk	1006-150
22011130	Qualitative Filter Papers, Grade 6, Slow, 3um, 180mm, 100pcs/pk	-
22012060	Qualitative Filter Papers, Grade 6, Slow, 3um, 200mm, 100pcs/pk	1006-200
22012061	Qualitative Filter Papers, Grade 6, Slow, 3um, 220mm, 100pcs/pk	1006-220
22012094	Qualitative Filter Papers, Grade 6, Slow, 3um, 240mm, 100pcs/pk	1006-240
22012062	Qualitative Filter Papers, Grade 6, Slow, 3um, 250mm, 100pcs/pk	1006-250
22012081	Qualitative Filter Papers, Grade 6, Slow, 3um, 270mm, 100pcs/pk	1006-270
22012063	Qualitative Filter Papers, Grade 6, Slow, 3um, 300mm, 100pcs/pk	1006-300
22012064	Qualitative Filter Papers, Grade 6, Slow, 3um, 320mm, 100pcs/pk	1006-320
22012065	Qualitative Filter Papers, Grade 6, Slow, 3um, 350mm, 100pcs/pk	1006-350
22012066	Qualitative Filter Papers, Grade 6, Slow, 3um, 400mm, 100pcs/pk	1006-400
22012082	Qualitative Filter Papers, Grade 6, Slow, 3um, 450mm, 100pcs/pk	1006-450
22012067	Qualitative Filter Papers, Grade 6, Slow, 3um, 600mm, 100pcs/pk	1006-600
22012090	Qualitative Filter Papers, Grade 6, Slow, 3um, 610mm, 100pcs/pk	-
Sheet Qualitative Filter Paper		
Cat#	**Description**	**Packaging (pcs/carton)**
Grade 101		
22011401	Qualitative Filter Paper, Grade 101, Fast, 20-25um, 60x60cm, 1,000.00pcs/carton	1,000.00

Grade 102		
22011402	Qualitative Filter Paper, Grade 102, Medium, 11um, 60x60cm, 1,000.00pcs/carton	1,000.00
Grade 103		
22011403	Qualitative Filter Paper, Grade 103, Slow, 3um, 60x60cm, 1,000.00pcs/carton	1,000.00

1.1.2 Wet Strengthened Grades

Wet-strengthened filter papers are mainly used in normal liquid clarification when filtration is performed under pressure or vacuum and a standard filter is easy to break. These extremely strong filter papers have a high wet strength due to the addition of a small quantity of chemically stable resin. Their use in normal qualitative applications will not introduce any significant impurities into the filtrate. The resins do, however, contain nitrogen so these grades should not be used in applications such as Kjeldahl estimations.

Features

* Widely used to assay sucrose in cane sugar and within pharmaceutical laboratories.
* Full range of diameter: 55, 70, 90, 110, 125, 150, 180, 185, 240,320 and 400mm
* Available from medium and fast flow rate
* Don’t recommend in applications of Kjeldahl estimations.

Grade Comparison

Hawach	BIO-91	BIO-113
Whatman	Grade 91	Grade 113
Advantec	n/a	n/a
Munktell	55/N	6 S/N
Ahlstrom	615	n/a
Macherey Nagel	n/a	n/a

Technical Data

Grade	Separating Property	Filtration Seconds	Filtration Speed	Ash Content (%)	Pore Size	Basis Weight (g/m^2)	Wet Burst (mm H_2O)
BIO-91	$PbSO_4$	>35--<70	Medium	<0.13	10μm	84	>=320
BIO-113	$Fe(OH)_3$	<35s	Fast	<0.13	30μm	68	>=320

Order Information (Customized size available)

Grade 91		
Cat#	**Description**	**Equivalent to Whatman**
22011301	Wet Strengthened Filter Papers, Grade 91, Medium, 10um, 70mm, 100pcs/pk	1091-070
22011302	Wet Strengthened Filter Papers, Grade 91, Medium, 10um, 90mm, 100pcs/pk	1091-090
22011303	Wet Strengthened Filter Papers, Grade 91, Medium, 10um, 110mm, 100pcs/pk	1091-110
22011304	Wet Strengthened Filter Papers, Grade 91, Medium, 10um, 125mm, 100pcs/pk	1091-125
22011305	Wet Strengthened Filter Papers, Grade 91, Medium, 10um, 150mm, 100pcs/pk	1091-150
22011306	Wet Strengthened Filter Papers, Grade 91, Medium, 10um, 180mm, 100pcs/pk	-
22012317	Wet Strengthened Filter Papers, Grade 91, Medium, 10um, 400mm, 100pcs/pk	-
Grade 113		
Cat#	**Description**	**Equivalent to Whatman**
22011307	Wet Strengthened Filter Papers, Grade 113, Fast, 30um, 70mm, 100pcs/pk	1113-070
22011308	Wet Strengthened Filter Papers, Grade 113, Fast, 30um, 90mm, 100pcs/pk	1113-090
22011309	Wet Strengthened Filter Papers, Grade 113, Fast, 30um, 110mm, 100pcs/pk	1113-110
22011310	Wet Strengthened Filter Papers, Grade 113, Fast, 30um, 125mm, 100pcs/pk	1113-125
22011311	Wet Strengthened Filter Papers, Grade 113, Fast, 30um, 150mm, 100pcs/pk	1113-150
22011312	Wet Strengthened Filter Papers, Grade 113, Fast, 30um, 180mm, 100pcs/pk	-

1.2 Quantitative Filter Paper- Ashless Grades (Ash <0.007%)

Hawach Scientific ashless filter papers are particularly suited for quantitative routine analysis. The ashless quantitative filter paper is made from pure alpha cotton cellulose and double acid washed then rinsed with ultra-pure water to neutralize and good for gravimetric analysis and preparation of samples for instrumental analysis. These filter papers are manufactured under intense quality control standards to be of the highest quality and consistency, ensuring uniform performance so that you can be confident with your results which are as accurate as can be.

Grade Comparison

Hawach	BIO-40	BIO-41	BIO-42	BIO-43	BIO-44
Whatman	Grade 40	Grade 41	Grade 42	Grade 43	Grade 44
Advantec	No. 5B	7	5C	-	6/4A
Munktell	390	00M/389	393/00H	392/00A	391
Ahlstrom	74	-	94	75	95
Macherey Nagel	640d	640m	640de	640md	640de

Features

* Ashless - extremely low ash content <0.007%
* Full range of diameter: 55, 70, 90, 110, 125, 150, 180, 185, 240, 320, 400mm
* Available from slow, medium, fast flow rate
* Good for gravimetric analysis and preparation of samples for instrumental analysis.

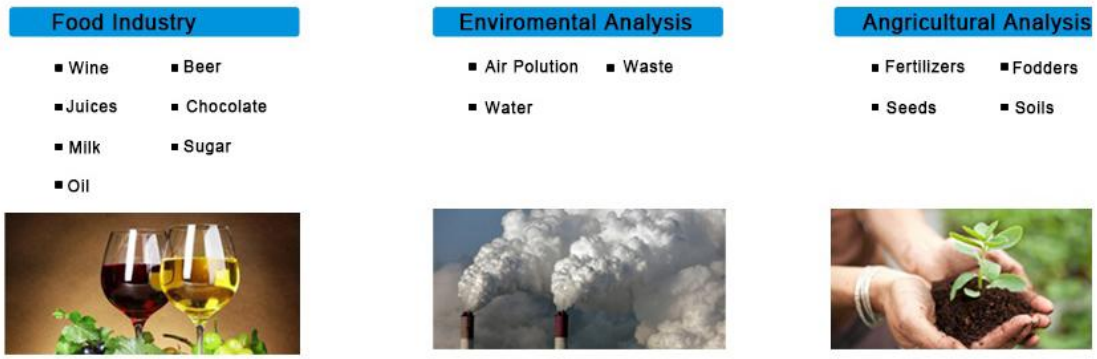
Technical Data

Grade	Particle Retention	Product Appearance	Filtration Speed	Ash Content (%)	Basis Weight (g/m^2)	Wet Burst (mm H_2O)
BIO-40	8.0μm	Smooth	Medium	<0.007	84	>140
BIO-41	20-25μm	Smooth	Fast	<0.007	84	>120
BIO-42	2.5μm	Smooth	Slow	<0.007	84	>180
BIO-43	16μm	Smooth	Medium to Fast	<0.007	84	>140
BIO-44	3μm	Smooth	Slow	<0.007	84	>180

Applications

Quantitative filter paper is suitable for a wide range of critical gravimetric analytical filtration procedures.

- Soil analysis, when separating solid matter from aqueous extracts
- Quantitative determination of milk sediment
- Analysis of constituent components in cements, clays, iron, and steel products
- Inorganic analysis in the construction, mining, and steel industries
- Particle collection for air pollution monitoring for subsequent analysis by X-Ray fluorescence (XRF) techniques



Order Information

Grade 40		
Cat#	**Description**	**Equivalent to Whatman**
22011201	Quantitative Filter Papers, Grade 40, Medium, 8um, 70mm, 100pcs/pk	1440-070
22011202	Quantitative Filter Papers, Grade 40, Medium, 8um, 90mm, 100pcs/pk	1440-090
22011203	Quantitative Filter Papers, Grade 40, Medium, 8um, 110mm, 100pcs/pk	1440-110
22011204	Quantitative Filter Papers, Grade 40, Medium, 8um, 125mm, 100pcs/pk	1440-125
22011205	Quantitative Filter Papers, Grade 40, Medium, 8um, 150mm, 100pcs/pk	1440-150
22011206	Quantitative Filter Papers, Grade 40, Medium, 8um, 180mm, 100pcs/pk	-
Grade 41		
Cat#	**Description**	**Equivalent to Whatman**
22011207	Quantitative Filter Papers, Grade 41, Fast, 20-25um, 70mm, 100pcs/pk	1441-070
22011208	Quantitative Filter Papers, Grade 41, Fast, 20-25um, 90mm, 100pcs/pk	1441-090
22011209	Quantitative Filter Papers, Grade 41, Fast, 20-25um, 110mm, 100pcs/pk	1441-110
22011210	Quantitative Filter Papers, Grade 41, Fast, 20-25um, 125mm, 100pcs/pk	1441-125
22011211	Quantitative Filter Papers, Grade 41, Fast, 20-25um, 150mm, 100pcs/pk	1441-150

22011212	Quantitative Filter Papers, Grade 41, Fast, 20-25um, 180mm, 100pcs/pk	-

Grade 42

Cat#	Description	Equivalent to Whatman
22011213	Quantitative Filter Papers, Grade 42, Slow, 2.5um, 70mm, 100pcs/pk	1442-070
22011214	Quantitative Filter Papers, Grade 42, Slow, 2.5um, 90mm, 100pcs/pk	1442-090
22011215	Quantitative Filter Papers, Grade 42, Slow, 2.5um, 110mm, 100pcs/pk	1442-110
22011216	Quantitative Filter Papers, Grade 42, Slow, 2.5um, 125mm, 100pcs/pk	1442-125
22011217	Quantitative Filter Papers, Grade 42, Slow, 2.5um, 150mm, 100pcs/pk	1442-150
22011218	Quantitative Filter Papers, Grade 42, Slow, 2.5um, 180mm, 100pcs/pk	-

Grade 43

Cat#	Description	Equivalent to Whatman
22011219	Quantitative Filter Papers, Grade 43, Medium to fast, 16um, 70mm, 100pcs/pk	1443-070
22011220	Quantitative Filter Papers, Grade 43, Medium to fast, 16um, 90mm, 100pcs/pk	1443-090
22011221	Quantitative Filter Papers, Grade 43, Medium to fast, 16um, 110mm, 100pcs/pk	1443-110
22011222	Quantitative Filter Papers, Grade 43, Medium to fast, 16um, 125mm, 100pcs/pk	1443-125
22011223	Quantitative Filter Papers, Grade 43, Medium to fast, 16um, 150mm, 100pcs/pk	1443-150
22011224	Quantitative Filter Papers, Grade 43, Medium to fast, 16um, 180mm, 100pcs/pk	-

Grade 44

Cat#	Description	Equivalent to Whatman
22011225	Quantitative Filter Papers, Grade 44, Slow, 3um, 70mm, 100pcs/pk	1444-070
22011226	Quantitative Filter Papers, Grade 44, Slow, 3um, 90mm, 100pcs/pk	1444-090
22011227	Quantitative Filter Papers, Grade 44, Slow, 3um, 110mm, 100pcs/pk	1444-110
22011228	Quantitative Filter Papers, Grade 44, Slow, 3um, 125mm, 100pcs/pk	1444-125
22011229	Quantitative Filter Papers, Grade 44, Slow , 3um, 150mm, 100pcs/pk	1444-150
22011230	Quantitative Filter Papers, Grade 44, Slow, 3um, 180mm, 100pcs/pk	-